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09/760,366	01/12/2001	Donald R. Boys	P665	1589

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EXAMINER

PHAM, THOMAS K

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 05/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/760,366

Applicant(s)

BOYS, DONALD R.

Examiner

Thomas K Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**First Action on the Merits**

1. Claims 1-42 of U.S. Application 09/760,366 filed on 01/12/2001 are presented for examination.

**Quotations of U.S. Code Title 35**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**Claim Rejections - 35 USC § 102**

6. Claims 16-18 and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,594,480 ("Montalvo").

**Regarding claims 16 and 27**

Montalvo teaches a software-control application for enabling priority-based number switching from a lower priority access number to a higher priority access number during a data session conducted by a user connected to a data-packet-network through one of a list of available access numbers comprising:

- a network-hosted part of the software application for initiating and directing the priority-based number switching based on monitored result (col. 8 line 66 to col. 9 line 11, "After prioritizing the dialing ... to the external network 22 is established");
- a client-hosted part of the software application for configuring at least one access number list including associated priority characteristics and for communicating the listing characteristics to the network-hosted part of the software application (col. 3 lines 10-13, "storing a plurality of ... user related information");
- a network-communication path between the client-hosted part of the software application and the network-hosted part of the software application, the network-communication path enabling bi-directional communication between the parts of the software application, characterized in that the user engaged in a data session on the data-packet-network using a lower priority access number may during the session be switched according to software instruction from the lower priority access number to an identified higher priority access

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number during the same session without manual intervention required of the user (col. 10 lines 1-11, "If it is determined that ... dialing strings have been exhausted").

**Regarding claims 17 and 28**

Montalvo teaches the data-packet-network is the Internet network (col. 6 lines 26-31, "if the user is attempting ... the Internet via MCI").

**Regarding claim 18**

Montalvo teaches the user utilizes a personal computer for Internet connection using dial-up modem software (col. 6 lines 31-33, "if the user is at location #1 ... access the Internet via MCI").

**Regarding claim 29**

Montalvo teaches the computerized node is a personal computer accessing through an Internet Service Provider (ISP) and the list of access numbers comprise available alternative ISP numbers (col. 2 lines 11-16, "a dialer program operating ... of the telecommunications device").

**Regarding claim 30**

Montalvo teaches the listed access numbers represent numbers generic to more than one ISP (col. 4 lines 15-20, "resident with the memory ... to the external network 22").

**Claim Rejections - 35 USC § 103**

7. Claims 1-7, 11-15, 19-26 and 31-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,594,480 ("Montalvo") in view of U.S. Patent No. 6,044,146 ("Gisby").

**Regarding claim 1**

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Montalvo teaches a network-based hardware and software system for enabling priority-based number switching from a lower priority access number to a higher priority access number during a data session through monitoring current connection states of a user node connected to the network during session and comparing those states with current states of known alternate access numbers available to the user node during the network session, comprising: a network-hosted part of a software application for monitoring the current user-node connection states and the current states of the alternate access numbers (col. 8 line 66 to col. 9 line 11, "After prioritizing the dialing ... to the external network 22 is established"); at least two network-access nodes connected to the network, the access nodes each accessible through dialing a network-access number from the user node (fig. 13A, elements 114, 122, 134 and 138); and a client-hosted part of the software application for listing access numbers, configuring priority states to the access numbers and for communicating the pertinent data to the network-hosted part of the software application, characterized in that a user connected to the network using a lower priority access number may continue the network session while a higher priority access number available to the user's node is identified from a list of alternate numbers through the monitoring performed by the network-hosted software application during the session, the identified number (col. 10 lines 1-11, "If it is determined that ... dialing strings have been exhausted"), also identified as currently accessible to the user's node, is either secured by the on behalf of the user, the user's node then disconnected and then re-connected to the secured number (fig. 1, element 24) or rendered to the user in a network notification after which, the user may manually disconnect and then reconnect to the available number (col. 2 lines 1-2, "User intervention to make the connection successful").

Montalvo does not teach a CTI-switch for establishing call connections and performing call

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switching according to instruction formulated through the monitoring for directing the CTI-switch function based on results of the monitoring. However, Gisby teaches a CTI application monitors the switching apparatus for routing incoming calls to different distribution point based on results of the monitoring (col. 5 lines 1-9, “a call distribution scheme ... busy on a call and which are not”) for the purpose of allowing more ways for people to interact, other than by just telephone. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the CTI switching application with the system of Montalvo because it would provide for enhancement computer interaction with call centers in more ways such as Email, Video mail, Video calls, the Internet in a variety of networks including LAN, WAN and the World Wide Web (WWW).

**Regarding claim 2**

Montalvo teaches the network accessible through the access numbers is the Internet network (col. 6 lines 26-31, “if the user is attempting ... the Internet via MCI”).

**Regarding claim 3**

Montalvo teaches the Internet is access through a telephony network (col. 6 lines 31-33, “if the user is at location #1 ... access the Internet via MCI”).

**Regarding claim 4**

Montalvo teaches the telephony network is the public-switched-telephony-network (PSTN) (col. 4 lines 8-11, “The modem 20 may be ... a wired PSTN (Public Switched Telephone Network) network 24”).

**Regarding claim 5**

Montalvo teaches the priority characteristics of the access numbers include at least the access

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and connection costs of using the numbers (col. 11 lines 1-3, "dialing strings from ... or a variation of both").

**Regarding claim 6**

Montalvo teaches the lowest cost access number retains the highest priority, the priority ratings graduating down for each access number in a list of numbers, the highest cost access number retaining the lowest priority (col. 11 lines 1-3, "dialing strings from ... or a variation of both").

**Regarding claim 7**

Montalvo teaches access numbers costing the same or exhibiting a negligible difference in cost to retain a same priority rating (col. 11 lines 1-3, "dialing strings from ... or a variation of both").

**Regarding claim 11**

Gisby teaches the network-hosted part of the software application is hosted at the CTI-switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

**Regarding claim 12**

Gisby teaches the client-hosted part of the software application communicates to the network-hosted part of the software application through a telephone-access number and interactive-voice-response interaction (col. 1 lines 31-42, "Development of CTI ... satellite based, etc").

**Regarding claim 13**

Montalvo teaches the network-hosted part of the software application is hosted by network-connected server node (col. 4 lines 18-20, "the dialer program 28 ... to the external network 22").

**Regarding claim 14**

Gisby teaches the network-hosted part of the software application communicates to the CTI

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switch through a network interface (col. 4 lines 14-25, "CTI processor 23 provides ... connected to LAN 57").

**Regarding claim 15**

Gisby teaches the network-hosted part of the software application communicates with the client-hosted part of the software application through an Internet path (col. 4 lines 32-44, "Processor 23 is linked to ... agent station is logged in").

**Regarding claim 19**

Gisby teaches the network-hosted part of the software application is hosted on a CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

**Regarding claim 20**

Montalvo teaches the network-hosted part of the application includes modules for monitoring a user connection, for storing and presenting a list of ISP-access numbers, for determining higher priority from the list (col. 2 lines 17-30, "The plurality of different ... user related information"), wherein Gisby teaches the CTI telephone switch.

**Regarding claim 21**

Montalvo teaches the network-hosted part of the software application is hosted on a network-connected server (col. 4 lines 18-20, "the dialer program 28 ... to the external network 22").

**Regarding claim 22**

Montalvo teaches the network-hosted part of the software application includes modules for monitoring a user connection, for storing and presenting a list of ISP-access numbers, for determining higher priority from the list, for simulating an out-bound dialer, for Internet communication, for Internet navigation, for user notification, and for ringing-event detection

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(col. 2 lines 17-38, "The plurality of different ... strings have been exhausted").

**Regarding claim 23**

Gisby teaches the network-hosted part of the application controls CTI switch function through a network gateway (col. 4 lines 14-25, "CTI processor 23 provides ... connected to LAN 57").

**Regarding claim 24**

Gisby teaches the client-hosted part of the software application communicates to the network-hosted part of the software application through a telephone-access number and interactive-voice-response interaction (col. 1 lines 31-42, "Development of CTI ... satellite based, etc").

**Regarding claim 25**

Gisby teaches the network-communication path is established through a telephony network using connection-oriented-switched-telephony lines (col. 4 lines 32-43, "Processor 23 is linked ... station is logged in").

**Regarding claim 26**

Gisby teaches the network-communication path is established through the Internet using Internet Protocols (col. 3 lines 52-58, "A telephony communications network 11 ... and Internet-Protocol communication").

**Regarding claim 31**

Gisby teaches identification is performed in a CTI telephony switch by CTI software (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

**Regarding claim 32**

Gisby teaches identification is performed in an Internet server by server software (col. 4 lines 18-

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20, "the dialer program 28 ... to the external network 22").

**Regarding claim 33**

Gisby teaches comparison is performed by CTI software associated with the CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

**Regarding claim 34**

Gisby teaches comparison is performed by the server software associated with the Internet server (col. 4 lines 18-20, "the dialer program 28 ... to the external network 22").

**Regarding claim 35**

Gisby teaches identification is performed by CTI software associated with the CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

**Regarding claim 36**

Gisby teaches identification is performed by the server software associated with the Internet server (col. 4 lines 18-20, "the dialer program 28 ... to the external network 22").

**Regarding claim 37**

Montalvo teaches the priority states of each listed access number equate with cost of connection and operation of each number from the location of the personal computer (col. 2 lines 31-39, "the dialer program ... strings have been exhausted").

**Regarding claim 38**

Montalvo teaches monitoring includes calling the higher priority numbers periodically (col. 9 lines 20-23, "If a busy signal ... the particular dialing string"), wherein Gisby teaches the calls placed from the CTI telephony switch.

**Regarding claim 39**

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Montalvo teaches monitoring includes calling the higher priority numbers periodically (col. 9 lines 20-23, "If a busy signal ... the particular dialing string"). Gisby teaches the calls placed from a CTI telephony switch and initiated from within the Internet server, the server communicating with the switch through a network gateway (col. 4 lines 14-25, "CTI processor 23 provides ... connected to LAN 57").

**Regarding claim 40**

Montalvo teaches monitoring includes accessing connection servers associated with the higher priority access numbers, the connection servers providing availability status of the associated number (col. 8 lines 53-56, "If the user has ... in the status field 110 of the screen 32").

**Regarding claim 41**

Montalvo teaches the monitoring is performed by the server software associated with the Internet server (col. 4 lines 18-20, "the dialer program 28 ... to the external network 22").

**Regarding claim 42**

Montalvo teaches notification is sent to the personal computer upon detecting a higher priority number and switching is performed according to user response (col. 4 lines 23-32, "Upon a user of the ... thereto in the memory 14").

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalvo in view of Gisby and further in view of U.S. Patent 6,134,589 ("Hultgren.").

**Regarding claim 8**

Montalvo and Gisby teach the network-based system with the priority characteristics of the access numbers but do not teach the priority characteristic includes bandwidth characteristics of

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the associated network-access nodes. However, Hultgren teaches a dynamic quality control network routing between an original node and a destination node that is capable of selecting several routes to get as high bandwidth as possible (col. 15 lines 27-32, "QSC server 20 ... as high bandwidth as possible") for the purpose of handling large file transfers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the dynamic network routing of Hultgren with the system of Montalvo and Gisby because it would provide for handling of large file transfers.

**Regarding claim 9**

Hultgren teaches selecting the routes with as high bandwidth as possible to handle the communication between the nodes (col. 15 lines 27-32, "QSC server 20 ... as high bandwidth as possible"). It would have been obvious to one of ordinary skill in the art at the time of the invention that the higher bandwidth retains higher priority rating when it is determined that bandwidth is more important in order to complete a task.

**Regarding claim 10**

Montalvo teaches priority characteristics for a network-access number include the cost characteristics of the associated network-access server node (col. 11 lines 1-3, "dialing strings from ... or a variation of both") and Hultgren teaches selecting bandwidth as a priority characteristic of the associated network-access server node (col. 15 lines 27-32, "QSC server 20 ... as high bandwidth as possible").

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874, Monday-Thursday and every other Friday from 7:30AM- 5:00PM EST or contact Supervisor *Mr. Anthony Knight* at (703) 308-3179.

Any response to this office action should be mailed to: **Director of Patents and Trademarks Washington, D.C. 20231**, or **Hand-delivered** responses should be brought to **Crystal Park II, 2121 Crystal Drive Arlington, Virginia, (Receptionist located on the 4th floor)**, or fax to the **official fax number (703) 872- 9306**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Thomas Pham**  
*Patent Examiner*

TP

May 14, 2004

  
**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**